# BOWIN Bowin Microelectronics

# UM66T Simple Melody Generator

### Features

- 64-note ROM memory
- 1.3V to 3.3V operating voltage and low power consumption
- Packaged in inexpensive TO-92 package
- Bulit-in RC oscillator
- Level-hold mode to play repeatedlyDynamic speaker can be driven with
- Dynamic speaker can be driven will external NPN transistor.

## **General Description**

The UM66T series is a CMOS LSI designed melody generator IC for use in telephones and toys application. It has an on-chip ROM programmed for musical performance. Produced by CMOS technology, the device results in very low power consumption. And with built-in RC oscillator, a compact melody module can be constructed with only a few additional components.

### **Absolute Maximum Ratings**

DC Supply Voltage 0	0.3V	to +5.0V
Operating Ambient Temperature	10°C	to 60°C
Storage Temperature	55°C	to 125°C

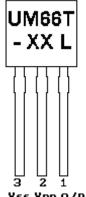
## **Electrical Characteristics**

(Vss=0V, VDD=1.5V, Ta=25°C, unless otherwise specified.)						
Parameter	Symbol	Min.	Тур.	Max.	Conditions	
Operating voltage	Vdd	1.3V	1.5V	3.3V		
Current Consumption	IDD	-	16µA	50μΑ	Playing with no load	
Output Current	lo/p	2mA	-	-		
Osc. frequency	Focs	63kHz	90kHz	117kHz		

### Song Series List

Part number	Song name
UM66T-01L	Jingle Bells + Santa Claus Is Coming To Town + We Wish You A Merry
	Christmas
UM66T-05L	Home Sweet Home
UM66T-09L	Wedding March (Mendelssohn)
UM66T-19L	For Alice
UM66T-32L	Coo Coo Waltz
UM66T-68L	It Is A Small World

# Pin Configuration (Front View)

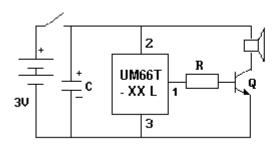


¥ss ¥dd O/P

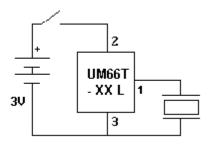
Pin no.	Symbol	Description
1	O/P	Melody Output
2	Vdd	Positive Power Supply
3	Vss	Negative Power Supply

# **Typical Application Circuits**

# LEVEL HOLD MODE FOR SPEAKER



# LEVEL HOLD MODE FOR PIEZO BUZZER



Recommended values :  $C = 1\mu F$  ,  $R = 4.7K\Omega$  , Q = 2SC9013

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